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Imaging laser assessment completed at sites

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KIRTLAND AIR FORCE BASE, N.M. — An environmental assessment was completed in November for an imaging laser program that will produce high-resolution images of space objects. The Air Force Research Laboratory's Directed Energy Directorate and Trex Enterprises of San Diego, Calif., in an educational partnership agreement with the New Mexico Institute of Mining and Technology, will begin program construction next year.

An environmental impact assessment released for public comment November 24th declared that the program would pose minimal short-term and no long-term impacts to the environmental condition of the area. The possible sites proposed, near White Sands Missile Range in Socorro, New Mexico, were tested through eleven broad environmental issue classes to determine potential impacts.

The area assessment included two possible sites, one within the Energetic Materials Research and one at White Sands Missile Range. The broad groups listed in the report included air quality, noise, water resources, biological resources, cultural resources, socioeconomics, transportation, safety and occupational health, geology and soils resources, hazardous materials and waste, and land use. The assessment included construction and working impacts of two building structures, the heliostat array, and associated infrastructure such as roads, electrical power, telephone, water, and sewer. In all categories, the results of the tests listed either no impact or negligible impact.

The program, Geo Light Imaging National Testbed, would enable researchers to image objects such as satellites from the ground with the precision and resolution equivalent to a 100-meter telescope. The testbed will use an array of light-gathering panels, or heliostats, to collect reflected light from objects in space. The light is then projected onto a large, curved panel that channels the information through a detector array of photo-multiplier tubes. These collect the light data and produce the final image.

Program construction is slated to begin in early 2004. Building costs are expected to be around $10.4 million. @